After Flooding

WHAT TO DO AFTER FLOODING

After a flood, your municipal government will notify the public through the media when it is safe to return home. The following are some important tips to help you clean up and restore your property. If you require more specific information on cleanup, contact your municipal office or your local health unit (Regional Health Authority). Let your insurance agent or broker know as soon as possible about any loss or damage. If you are a tenant, inform your landlord about any flood damage to the property.

Food Establishments

- If you own or manage a food establishment, notify your Regional Health Authority for direction.

Protecting Yourself and Your Family

Floodwater may be contaminated with sewage and other contaminants, and could pose a health hazard. Proper clean-up is essential. Contact your local health unit if you suspect sewage contamination. Be sure to comply with their recommendations about using respirators, special clothing, or other protective measures. Do not try to save carpets, clothing or bedding that have been exposed to sewage. Sewage contaminated waste materials should be placed in heavy-duty garbage bags and tagged. Follow your municipality's instructions for disposal.

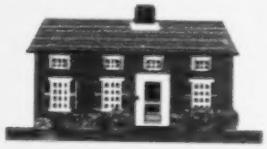
- Do not allow children into the house or yard until everything has been cleaned and disinfected. If children must be present during clean up, supervise them closely.
- Wear rubber boots, rubber gloves and eye protectors to prevent injuries.
- Be vigilant about good personal hygiene, i.e., wash face and hands with soap before eating, drinking or smoking.

- Check your newspaper and listen to your local radio or television stations for information about help that may be provided by your municipal or the provincial government, your Regional Health Authority or other agencies.
- Prompt action will help to prevent mold. Try to get all wet surfaces clean, disinfected and dry as soon as possible. *(see Disinfectants - page 4)*
- Cleanup priorities include:
  - Removing water as soon as possible.
  - Clean out mud and other debris.
  - Discarding all materials that cannot be saved. Place them in a bag, tag the bag(s), and dispose of them according to municipal regulations.
  - Wash and rinse all fabrics and furniture that will be sent out for cleaning, then dry and take them to the cleaners as soon as possible.
  - Wash and rinse all surfaces, then disinfect them.

- A flood disaster is both mentally and physically stressful. Take steps so that you and your family maintain their health.
  - Rest often and eat properly.
  - Make a list of jobs that need to be done and do them in the order of priority, one at a time.
  - Talk to others about your concerns and don't be afraid to ask for help.
  - Check your newspaper and listen to your local radio or television stations for information and help from your municipal government and/or your Regional Health Authority on coping with the emotional effects of a disaster.
- Before hiring clean up or repair contractors, make sure they are qualified to do the job. Check to ensure they have a business license. Get at least three written estimates, outlining the work that needs to be done, the total cost, and the starting and completion dates. Ask for references and check them out.

Insurance Claims

- Inform your insurance company as soon as possible about any damage to your property or vehicles.
- Obtain receipts for any emergency repairs or for clean-ups that are needed to prevent or minimize further damage to your property.
- Photograph and/or video tape the damage to support a possible insurance claim.
- The Insurance Bureau of Canada provides information about insurance claims. Their toll free number is 1-800-232-7475.



RETURNING HOME

As soon as floodwaters have receded and you have been notified that the flood danger is over, you will want to return to your house and start cleaning up. Do not attempt to live in the house, however, until you take the following precautions:

- Have the electric power system checked by an electrician.
- Have natural gas and propane appliances checked by a gas fitter.
- The water supply has been declared safe for drinking.
- Your sanitation facilities are working.
- All flood-contaminated rooms have been cleaned and disinfected.

Entering Your Home

- Make sure the building is safe before entering. Check for foundation damage and make sure all porch roofs, and overhangs have their supports intact. If you see damage contact a building inspector.
- If you see downed power lines or smell gas, leave the building and contact your utility company.
- If your basement was flooded, do not switch on the electricity until the complete system has been checked by a qualified electrician.

- Be very careful when you enter the building. A door sticking at the top could mean that the ceiling is ready to fall. If you have to force the door open, make sure you stand outside, well clear of any falling debris.
- Look for wet plaster on the ceiling. Knock it down with a stick before moving around.
- Use a flashlight to inspect for damage inside the house. Do not strike a match or use an open flame unless you know the gas has been turned off and the area has been ventilated.

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- Watch your step. The floors and stairs can be very slippery, and silt on a basement floor may conceal nails or broken glass.
- Open all doors and windows to dry out the building.

Starting the Clean-up

- Pump out the basement when it is safe to do so. If water has been standing for some time, is visibly cloudy, and/or has a foul smell, it is likely polluted and requires urgent treatment and removal. Pumps, wet/dry vacuums, and dehumidifiers may be available to rent. To hire a professional service, look in the telephone directory Yellow Pages under "Water Damage Restoration Services."
- Move your belongings out of the wet area. Clean and then spread out to dry.
- If your home was flooded by sewage, discard exposed carpets, clothing, bedding and stuffed toys. Place these items and any other items you do not want to keep in heavy-duty garbage bags for disposal.
- Remove all mud and debris by scraping and washing with detergent, using a stiff broom or brush. This may be contaminated material and may need to be properly disposed of. Follow your municipality's instructions for disposal.
- Never leave waste on the ground where children are at risk and insects or animals could pick up disease-causing organisms.
- Disinfect all walls, floors, ceilings and fixtures after they have dried. Make your own disinfecting solution by adding 125 millilitres (a half cup) of household bleach to 9 litres (2 gallons) of water or use a commercial disinfectant according to directions. Rinse metals after washing with a chlorine solution to prevent corrosion. Coat cast-iron items with vegetable oil to prevent rusting. (See *Disinfectants* on page 4)
- **DO NOT use gas-powered generators, camping stoves or charcoal barbecues indoors.** The fumes are hazardous indoors.

RESTORING WATER SUPPLY

- Water must be boiled or chlorinated before use until flooded and contaminated wells, cisterns, dugouts and dams have been treated and water samples analyzed as safe by your health unit (Regional Health Authority).
- Until well and cistern water is made safe, disinfect available water according to the following table. Add the solution to the water, thoroughly mix and allow to stand for 30 minutes. The water should have a slight chlorine taste. If this taste isn't present, repeat the dosage and allow to stand for another 30 minutes.

Emergency Water Disinfection

Litres (gallons) of water to be Treated	Dosage of Disinfecting Compounds	
	Chlorine Bleach Drops	Water Purification Tablets
(clear water) 4.5 L (1 gal.)	4	Follow directions on bottle
(cloudy water) 4.5 L (1 gal.)	10	Follow directions on bottle

Cisterns

Cisterns must be emptied, thoroughly cleaned, and refilled with chlorinated water. The following procedure should be used to get a cistern back into service:

- Remove all mud, cleaning the cistern thoroughly with broom or brush.
- Disinfect with a concentrated solution of chlorine bleach: 450 millilitres (2 cups) to 450 litres (100 gallons) of water.
- Pump a thoroughly mixed, concentrate solution of chlorine bleach through the system. Then close all outlets and allow the solution to remain in the system for eight hours.
- Thoroughly rinse the whole system with disinfected water. The odour of chlorine must disappear completely. This step is essential because chlorine can corrode metal pipes and tanks.

Dugouts and Dams

Follow this procedure to put a dugout back in service:

- Pump out and remove sludge and debris.
- Make any repairs required.
- Refill the dugout.
- Consider installing a continuous chlorination-filtration system. Technical advice and information may be obtained from your Alberta Agriculture, Food and Rural Development district office.

Plumbing

- During a flood, the water pressure in plumbing lines can reverse, and water in hot and cold pipes can be contaminated with floodwater. Have a plumber inject bleach into the lines to disinfect them.
- The footing drains outside your foundations may have been overloaded or blocked during the flooding. Have them checked by someone trained in plumbing and drains.
- Floor drains may be partially or fully blocked because of the flooding. Carefully flush, clean and disinfect floor drains and sump pumps.

Wells

Wells must be thoroughly pumped out and inflow water chlorinated. This procedure should not be attempted on shallow wells until at least two weeks after floodwaters have receded. Otherwise, they may be re-contaminated by polluted ground water.

Use the following procedure for getting a well back into service:

- Pump out the well.
- Thoroughly clean bored or dug wells. Remove floating debris and scrub or hose foreign material from well cribbing or casing. Then pump the well until water is clear.
- Pump 900 litres (200 gallons) of water into clean storage near the well.
- Pour 9 litres (2 gallons) of household laundry bleach (5.25 per cent chlorine) into well. You can get an equivalent strength of chlorine by substituting 4.5 litres (1 gallon) sodium hypochlorite (12 per cent chlorine) or 0.6 kilograms (22 ounces) by weight of calcium hypochlorite (70 per cent chlorine.)
- Allow water to return to the non-pumping level in the well.
- Mix 9 litres (2 gallons) of household laundry bleach into the 900 litres (200 gallons) of water stored near the well and syphon the mixture into the well.
- Open each hydrant, faucet and other outlet in the distribution system and let it run until water at the outlet has a chlorine odour.
- Allow chlorine mixture to stand in the entire distribution system at least eight hours, preferably overnight.
- After the chlorine mixture has been in the system for at least eight hours, open an outside tap and let the mixture run onto the ground surface until all chlorine odour has disappeared. In high capacity wells it may be necessary to add enough clean water to the well during pumping to displace the water stored above the pump intake.
- Backwash all filters and softeners and flush the hot water tank.

- If the wastewater has a chlorine odour and you have difficulty removing the chlorine from the well, it indicates that

too much chlorine was used. When the correct quantity of chlorine is used, the wastewater will have a chlorine odour, but the odour will disappear after the well has been pumped continuously for two to three hours.

- Don't pump the wastewater into the septic tank. It will impair operation and cause flooding.
- After you have followed these procedures, obtain a sterile water-testing bottle from your local health unit and return a well water sample for analysis. Do not use the well water without first disinfecting it and until you have been notified that the water sample is safe.

RESTORING SEWAGE SYSTEM

A house should not be re-occupied until satisfactory toilet facilities have been restored. Solid or liquid wastes must never be deposited on the ground where insects and animals can pick up and spread disease-causing organisms.

Insect Control

- For advice on insect control, contact your local health unit (Regional Health Authority) or a professional pest control company.

Municipal Sewers

- Householders will be notified when the municipal sewage system has been restored.

Outhouses (Pit Privies)

- Ensure that the outhouse is securely over the pit.
- If water remains in the pit, add ½ litre (2 cups) of household laundry bleach or 0.45 kilogram (1 lb.) of chloride or lime every week until the water disappears.
- If the outhouse has been washed away, cover open pits to prevent accidents and the spread of disease, until it can be replaced.

Septic Tanks

- Septic tanks won't operate until the disposal (leaching) field has dried. Check the syphon/pumping chamber (second compartment) to ensure that the intake of the syphon or pump is not blocked.
- **NEVER enter a septic tank to check out a pump or syphon system without being protected by a certified air pack and a safety harness with rope. The atmosphere in a septic tank can be lethal causing death without the use of proper safety equipment. At least one observer must be present when anyone enters a septic tank. This is for safety reasons and for quick removal of a person from the tank if anything should happen to cause a dangerous situation.**

Yard Clean-up

- Follow your municipality's instructions for disposal of contaminated and other materials.
- Locate garbage for collection by municipal services at a safe distance from the home and downgrade of a well.
- Make sure that materials, which attract insects or animals, are sealed in animal-proof containers.

RESTORING THE HEATING SYSTEM

Before starting up the heating system, protect yourself against the hazards of fire, suffocation and explosion. Be careful to take all precautions to ensure the heating system is safe before resuming use. Have it inspected by a qualified technician.

Coal/Wood Stoves/Furnaces

- Before lighting the furnace, examine the inside of the combustion chamber and clean it thoroughly.
- Wash sediment from all pipes and ducts with a hose or a swab on a long stick. Access can usually be made through the clean-out door above the fire door. If the heater has a jacket, clean between the heater and the outside casing.
- Ensure that the chimney isn't plugged. Take the smoke pipe out of the chimney and remove any mud from the lower part of the chimney.
- Have the heating system checked by a qualified technician before using it again.

Duct Work

- Hire a contractor to clean and inspect ductwork.

Gas Furnaces/Appliances

Do not touch any electrical fixtures or switches. If the odour of gas is present, leave the building immediately, leaving the doors open. Contact the gas utility company. **Do not re-enter the building until the leak has been repaired.**

- When it is safe to clean gas appliances:
  - Disconnect the vent connectors from appliances and clean thoroughly.
  - Open the clean-out door at the base of the chimney and clean it thoroughly, removing mud and debris.
- Remove and clean any fan assemblies that have gotten wet. If any electric motor has been wet, have it checked by an electrician. It may be dangerous to use.
- Do not touch any gas controls or attempt to reconnect gas appliances. The system must be checked by a licensed gasfitter before being put back into service.
- Have propane systems checked by a licensed gasfitter before turning them on.

Water Heaters

- Water heaters are insulated with glass fibre, which can become soggy and saturated under its cover if flooded. If the appliance can be repaired, have the insulation replaced, as it is contaminated by the floodwaters.

RESTORING ELECTRICAL APPLIANCES

- If the electrical panel was submerged, have a qualified electrician replace all circuit breakers.
- All electrical appliances that got wet by the floodwaters should be checked by an electrician before being used.
- Depending on the depth of water in which the appliance was submerged, it may be less costly to replace rather than repair appliances.
- Appliances with foam insulation, such as ovens, refrigerators, and freezers that were submerged in floodwater, may have to be discarded because they cannot be disinfected. Check with an experienced serviceperson as to whether or not it is possible to remove and replace the insulation.
- All lighting fixtures, which were submerged in water, should be removed, cleaned and dried, and checked. Clean outlet boxes, wiring and sockets but do not remove connections or disconnect wiring. Connections in wiring and lights and small appliances can be wet and soggy even after the cover tape looks dry. Be sure they are dry before using. If you have any doubt about appliances or wiring, contact your electrician.
  MAKE SURE THE POWER SUPPLY IS TURNED OFF BEFORE WORKING ON OUTLETS AND FIXTURES.
- Floor and table lamps should be completely disassembled, cleaned and dried thoroughly, before using.
- Extension cords that are not in good condition should be discarded.

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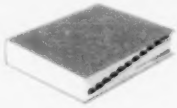
RESTORING THE INTERIOR OF YOUR HOUSE

Bedding and Clothing

- Discard mattresses, box springs, pillows and comforters that were soaked with floodwaters. They cannot be adequately disinfected and cleaned.
- Have wool, silk and rayon clothes dry-cleaned as soon as possible.
- Remove mud from remaining clothes and bedding by rinsing in cold water. Then wash in warm soapy water, adding a disinfectant at the end of the washing cycle.
- Cotton and linen fabrics soiled with red or yellow clay require special treatment. Do not immerse them in hot, soapy water or the stains will set. Brush off all loose dirt and rinse until no more dirt can be removed. Then wash in **warm** soapy water, using several washings if necessary. Add disinfectant at the end of the washing cycle, but be careful when bleaching coloured materials. Test a small section of a seam with the solution.
- Mildew stains are caused by a fungus growth. Remove light stains on cotton or linen with lemon juice or household bleach.



Books and Paper Goods

- It may not be possible to salvage books and other paper goods that have been saturated by floodwaters. Paper that is kept together in a wet state for several days may meld into a solid mass and become unsalvageable.
- If you have important or valuable books you wish to restore:
  - Hold book closed when rinsing.
  - If the book is partially wet or damp, stand book on the top or bottom edge with covers open at a 90° angle and air dry.
  - If a book is very wet, lay it flat on a clean surface, interleave less than 20 per cent of book with absorbent material; replace interleaving when it becomes damp.
  - After pages have been exposed to the air for a while, press them to prevent crumbling.
  - Alternate drying and pressing until the pages are thoroughly dry; otherwise mildew will result.
  - Avoid drying books too long in full sun as this can damage the bindings.
- If you have too many books to air dry in 24 hours:
  - Rinse off dirt, towel dry by blotting (not rubbing).
  - Wrap books loosely in freezer or waxed paper.
  - Pack spine down in sturdy containers.
  - Freeze.
- Air dry paper documents in small piles about half an inch high.
  - Interleave; replace interleaving with dry sheets when it becomes damp.
  - If there too many items for air-drying interleave (by groups or individually) with freezer or waxed paper, pack carefully in sturdy containers and freeze.
- Make every attempt to clean and save legal documents and other valuable papers, as this is less costly than paying to replace them. If mold damage has occurred, or the document is becoming distorted, focus on saving the information.
  - Have true copies notarized. The damaged originals can then be destroyed and the certified copies preserved. Check with a lawyer to determine which documents can be saved in this way.
  - Birth records passports and other government documents can be replaced and the damaged versions destroyed. Check with your local government offices to find out which documents can be replaced in this way.
  - Large documents, such as maps, can be preserved by passing them through hot rollers at a copy shop that makes blueprints. This must be done before the paper dries.

Ceilings

- If the ceiling has mold growth, treat it with a full strength bleach solution, but be sure to check the source of the problem and also the condition of the insulation.
- Carefully clean ceilings that are only surface damp, to ensure that a thin film of mold did not grow when the air was very wet or muggy. Use a chlorine bleach solution (see *Disinfectants* on page 4).
- Ceilings above the high-water mark may be dry and undamaged, but should still be checked as water can wick upward and along wall materials, saturating ceilings. Clean and disinfect after checking.

Cement Structures and Surfaces

- If necessary, pump out the basement when it is safe to do so. Be aware that the water may be contaminated and should be disposed of according to your municipality's instructions.
- Use a wet/dry vacuum to remove all mud, dirt and other debris from cement walls and floors of your home. A vacuum with a HEPA (High Efficiency Particulate Arrestance) filter is recommended to reduce the distribution of respirable contaminants throughout the home.
- To clean and disinfect cement surfaces use a solution of water and tri-sodium phosphate (TSP). Follow the manufacturer's instructions for preparing and using the solution. Ensure this solution covers all the cement surfaces.

Cleaning Materials

- Use laundry detergent for general cleaning and dishwashing liquid for removing dirt from lightly soiled material and surfaces. Rinse off any residue because too much soap or detergent can leave a film on surfaces. Use warm, not hot water, for washing, as hot water can set stains from contaminants that were in the floodwater.
- Use chlorine bleach for disinfecting surfaces and materials that are bleach tolerant (see *Disinfectants* - page 4).
- Keep the area well ventilated as cleaning products can affect the lungs and skin.

Cupboards and Counters

- All surfaces of counters and cupboards must be thoroughly cleaned and disinfected.

Dishes, Cutlery and Utensils

- Thoroughly wash all contaminated dishes, cutlery and utensils, then sterilize by immersing them in boiling water or a disinfecting solution such as one (1) part household chlorine bleach to three (3) parts water, or a commercial product, as per the manufacturer's instructions, for ten minutes. Alternatively, the dishes can be washed in a dishwasher using very hot water.
- To prevent rusting, coat cast iron utensils with vegetable oil before putting them away.
- Clean brass and copper with a recommended cleaner. Wash with warm soapy water and dry.

Disinfectants

- Household liquid chlorine bleach (5 per cent sodium hypochlorite solution) is an effective disinfectant for most bacteria and fungi (like mold). Use bleach carefully and be sure you have cross ventilation.
  - Surfaces and structures with mold growth - use full strength household bleach and let it remain on the surface for 15 minutes.
  - For surfaces (not cement), structures, dishes, cutlery and utensils where no mold is visible - use one (1) part bleach to three (3) parts water.
  - Bleach can destroy organic fabrics so do not use on silk and wool.

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items. It can also weaken cotton fibres so use with care.
  - Bleach can affect the colours of many surfaces and materials. Test on a small area before using.
  - **Never mix bleach with ammonia. The fumes produced together are very toxic.**
- For cleaning and disinfecting cement structures see *Cement Structures and Surfaces* on page 4.
- For wooden surfaces which could be damaged by a bleach solution - use a 5 to 10 percent borax solution with dishwashing detergent. Then next day wash with a one (1) part vinegar to three (3) part water solution and then rinse.

Doors, Windows and Woodwork

- Remove all doorknobs before cleaning, disinfecting and drying doors.
- Lay doors on a level surface with wooden strips separating them. This will permit level drying with minimal warping.
- Disassemble and clean locks. Wipe working parts with kerosene and then oil them sparingly to prevent dripping.
- Door and window frames should be checked for warping and twisting and repaired if necessary.
- Sliding windows should be removed and both the windows and the track cleaned and disinfected.
- Sliding or bifold doors should be removed and both the door and tracks cleaned and disinfected.
- Do not paint and redecorate until everything is completely dry or your efforts will be wasted.

Electronic Equipment

- Computers, radios, stereos and televisions which have been under water may be unsalvageable. Check with your local electronics repair shop.
- Wear gloves when handling diskettes and compact disks to avoid scratching the surfaces.
- Do not use magnetized tools/scissors.
- Bathe compact disks and diskettes in clean, distilled water, dry with lint-free towels.
- When copying the disks, clean drive heads frequently to protect equipment.

Floors

- Plywood and particleboard sub floors are usually not recoverable after having been submerged in water. They are constructed with non-waterproof glues, which separate when in contact with water.
- Basement subfloors may need to be removed to allow thorough cleaning, disinfecting and drying. Otherwise mold growth and odours will persist. Floors laid on concrete must be opened at both ends and warm air forced between joints to dry both the wood and the concrete. If odours persist after drying, the floor may have to be removed.
- Remove wet carpets and other sponge-like materials off floors as soon as possible, so that the floor does not start to distort or delaminate.
- Clean and disinfect floors and allow to dry at normal temperature.
- Buckled floors. Soaked wood floors, especially hardwood, will likely buckle. Restore them as follows:
  - Clean and disinfect, and allow to dry at normal temperature.
  - Don't attempt repairs of wooden floors until they are thoroughly dried out.
  - When the floors are dry, draw back some of the buckling boards with nails. Plane or sand down small humps. Salvaged floors will be marred but may serve as a base for new covering.
  - Hardwood floors are somewhat difficult to repair. It may be possible to draw some of the buckled boards back with nails. Small humps may be removed by planning or sanding. If warped badly, the floor may have to be replaced.
  - Tongue and groove sub-floors may buckle or warp as a result of being soaked. Usually this can be repaired by applying additional nails or screws to the buckled areas.
- Linoleum or vinyl tiles may be loosened or damaged by moisture. Consult a floor contractor to determine if the damage can be repaired.

Foods

Floodwaters carry disease from raw sewage. The only safe flood-exposed foods are those in sealed metal cans, and even then, only if cans have not been dented. Use the following procedures with foods.

- Thoroughly clean all undamaged cans before opening. Use a brush to clean around the rims and caps. Disinfect, rinse and dry before storing. (See *Disinfectants* on page 4)
- Dispose of the following items:
  - the contents of your freezer or refrigerator, if electricity has been interrupted and contents thawed, or if appliances have been exposed to flood waters.
  - all exposed meats.
  - all exposed fresh fruits and vegetables.
  - all exposed boxed foods.
  - all products in jars, including home preserves, cans and bottles that have been under water. The area under the seal of a jar or bottle cannot be adequately disinfected.
  - products in coolers, if the coolers have been without power for four (4) hours.
  - all exposed medicines, cosmetics and other personal care items.
- If in doubt about any items, contact your local health unit (Regional Health Authority).

Framed Artwork

- Remove paintings from frames in a safe, dry place. DO NOT separate paintings from their stretchers.
- Keep wet paintings horizontal, paint side up with nothing touching the surface. Avoid direct sunlight.
- Remove art on paper or photographs with glass fronts from frames.
- If art sticks to glass, leave it in the frame and dry with glass side down.
- Always dry artwork slowly, image side up with nothing touching the surface.

Furniture - Metal

- Wash with clean, soapy water and then disinfect with bleach solution. Rinse and dry.
- Put foil or something similar under legs, until completely dry, to prevent furniture from staining the floor.

Furniture - Upholstered

- Rinse off mud.
- Chairs, chesterfields, sofas which have metal or wooden frames can be salvaged but the covering, stuffing and padding must be discarded.
- Mildewed upholstery:
  - Brush off loose mold with a brush or broom. Do this outdoors to avoid spreading mildew spores around the house.
  - Vacuum to remove more mold.
  - If mildew remains, sponge lightly with soap or detergent suds or a 50-50 solution of rubbing alcohol and water. Be careful not to get the padding wet.
  - Thoroughly dry the item by using an electric heater, a fan or the sun to stop further growth of molds.
  - If the upholstery has been soaked with floodwater, consider discarding the piece or sending it to a commercial shop for thorough disinfecting, cleaning and reupholstering.
- It may not be possible to clean furniture contaminated with sewage or other organic materials. You must act promptly if you want to salvage the furniture. Be sure to let the furniture

restorers know the item was exposed to sewage.
- The cost to repair upholstered furniture may be greater than the replacement cost.

Furniture - Wood

- Remove all furniture to a sheltered area outdoors.
- Wipe off surface moisture because wood deteriorates quickly.
- Remove all drawers, slides and other working parts. Do not attempt to force drawers by prying them from the front. Instead, remove the back of the piece, cutting it out, if necessary, and push the drawers out.
- Clean all furniture and rinse with a mild disinfectant (caution - test a small area to ensure disinfectant will not damage wood finish).
- Clean the drawers and take them indoors, storing them away from heat to allow slow drying.
- To clean furniture damaged by high humidity, use a cloth dampened with ammonia, spirits of camphor or essence of peppermint. Apply to white spots or scum on varnished surfaces and immediately wipe dry. Then apply furniture wax or polish.
- Dry furniture slowly so that warping and twisting is reduced (do not leave in sun).
- Have veneered furniture professionally repaired.
- Furniture made of particleboard or veneers laminated on particleboard generally cannot be restored as these materials swell or separate beyond repair, or the cost to repair may be greater than the replacement cost.

Garden Produce

- Discard aboveground produce that was exposed to flood waters. Aboveground produce that was not exposed to flood waters should be harvested carefully to avoid contamination.
- Leave belowground produce in the soil to reduce soil contamination through natural processes such as sunlight.
- When harvesting, wash belowground produce thoroughly, preferably in a one-part bleach to 10 parts water solution. Rinse before cooking.
- Do not eat harvested produce raw.

Insulation

- Fibrous insulation materials, such as glass fibre, mineral wool and cellulose lose their insulation capabilities when flooded and will have to be discarded. These materials also trap pollutants from the floodwaters, and can become moldy.
- Board insulation, such as styrofoam and urethane, can also become saturated. Unless you are sure that water and dirt is not trapped behind these materials, it is safest to remove and replace them.
- Always remove the insulation to well above the obvious high-water mark and then clean, disinfect and dry the wall cavities to prevent mold and other problems developing.
- Re-insulate with new material once the wall cavity materials are thoroughly dry.

Leather

- Clean with a damp cloth, then buff with a dry cloth.
- Stuff purses and shoes with newspaper to retain their shape.
- Leave suitcases open to dry out.
- Keep leather goods away from heat or direct sunlight while drying.
- Clean with saddle soap when dry. Use a suede brush or steel wool on suede.
- Rinse leather and suede garments in cold water and dry them away from heat or direct sunlight.

Photographs

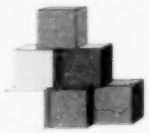
- Remove from enclosures or frames.
- Carefully rinse with cool, clean water as necessary.
- Do not touch or blot surfaces.
- Air dry: hang with clips on non-image area, or lay flat on absorbent paper. Keep photographs from contact with adjacent surfaces or each other.
- If there are too many photographs to air dry in 48 hours:
  - Keep photographs in a container or clean water no more than 48 hours.
  - Freeze. If possible, interleave each photo with freezer or waxed paper.
- Do not freeze glass plate negatives.

Rugs and Carpets

- Rugs and carpets must be restored as soon as possible to prevent mildew.
- Use a wet/dry vacuum to remove as much water as possible. Then clean and **disinfect** with a commercial rug shampoo containing disinfectant. Make sure the disinfectant will not discolor the fabric. Dry carpets as quickly as possible; a fan will help.
- Glued-down rugs and carpets may have to be destroyed if submerged in floodwaters, as the water usually deteriorates the rug glues and backing. If attempting to salvage them, remove as much water you can (use a wet/dry vacuum), and dry by using a dehumidifier and large fans to blow air over the surface of the carpet.
- For carpets with underpads, remove as much water as possible. Pull back the carpet gently. You may have to remove the baseboards that hold the carpet in place. Remove the carpet and hang it to dry. The under pad may need to be replaced.

Sandboxes

- The sand should be disinfected or removed and replaced.



Toys

- Discard stuffed toys that were exposed to sewage or take them to a professional cleaner.
- Clean plastic and metal toys with clean soapy water and a disinfectant.
- Toy clothing should be treated the same way as household clothing and bedding.

Walls and Wallpaper

- Gyproc walls swell when in contact with water and have to be replaced. Cut off the gyproc above the water line to allow the wall cavity to dry, and to prevent the gyproc from wicking water further up the wall.
- Some wall finishes, such as wood and paneling, may be salvageable if removed and properly dried.
- If water enters the wall cavity, the wall finish and insulation should be removed to prevent mold and to allow the wall cavity and framing to dry thoroughly. It can take days or weeks for wooden studding to dry.
- Although walls constructed of gyproc, plaster or wood will dry out in time, the insulation in these walls is no longer effective. As insulation becomes soaked, the weight causes it to settle and compact at the bottom, leaving the upper area of the wall without insulation.
- If you are sure the interior of the walls are not wet, then wash with a detergent and bleach solution and dry.

- All walls in a flooded home should be cleaned and disinfected as the exposure to excessive humidity can cause mold growth.
- Don't wash damp plaster; it must be dry before it can be cleaned.
- You will probably have to replace wallpaper unless it is washable.

RESTORING THE FARM BUSINESS

- Alberta Agriculture, Food and Rural Development (AAFRD) can provide information and assistance on covering preparedness, response and recovery.

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information for all disasters. Please contact your AFRD district office or see the AFRD website on **Ropin' the Web** (*http//www agric gov ab ca*) fo "Agriculture Disaster Management".

References

- Alberta Agriculture, Food and Rural Development internet page: http://www.agric.gov.ab.ca
- Alberta Health & Wellness internet page: http://www.health.gov.ab.ca
- Emergency Management Alberta internet page: http://www.municipalaffairs.gov.ab.ca/ema
- *Cleaning up Your House After a Flood* NHA 6789. Canadian Mortgage and Housing Corporation. C7-310, 700 Montreal Road, Ottawa, Ontario K1A 0P7

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- **North Central Alberta**
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  2101, 10320 – 99 Street
  Grande Prairie, Alberta T8V 6J4
  Phone: (780) 518-5387
- **Northern Lights Regional Health Authority**
  7 Hospital Street
  Fort McMurray, Alberta T9H 1P2
  Phone: (780) 791-6024

REGIONAL HEALTH AUTHORITIES
Public Health Services

- **Chinook Regional Health Authority**
  960 – 19 Street South
  Lethbridge, Alberta T1J 1W5
  Phone: (403) 382-6009
- **Palliser Health Authority #2**
  666 – 5 Street SW
  Medicine Hat, Alberta T1A 4H6
  Phone: (403) 529-8042
- **Calgary Regional Health Authority**
  10101 Southport Rd SW
  Calgary, Alberta T2W 3N2
  Phone: (403) 943-1110
- **David Thompson Regional Health Authority**
  602, 4920 – 51 Street
  Red Deer, Alberta T4N 6K8
  Phone: (403) 341-8622
- **East Central Regional Health Authority**
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  Camrose, Alberta T4V 1Y8
  Phone: (780) 608-8800
- **Capital Regional Health Authority**
  1J2 Walter Mackenzie Centre
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- **Aspen Regional Health Authority**
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